# CROSSTALK

Edition 99 - October 2002





In July 2002, Lieutenant Colonel (Colonel-Select) M. Kelli Ballengee joined the Air Force Center for Environmental Excellence, Environmental Quality Directorate (AFCEE/EQ) and succeeds Colonel Jack Jeter as the new Environmental Quality Director. In this position, she directs a multidisciplinary team responsible for providing expert technical pollution prevention and compliance advice and contracting services to Air Force commanders worldwide. Colonel Ballengee is also charged with identifying, developing and crossfeeding innovative, cost-effective technologies, plans and techniques to reduce Air Force dependency on hazardous materials.

Colonel Ballengee, who holds a Master of Science degree in Environmental Health Engineering, received a direct commission and entered the Air Force in 1979 after graduating with a Bachelor of Science degree in Biomedical Engineering from Marquette University in Milwaukee. She has since served on Air Force headquarters and major command staffs and in research and development and bioenvironmental engineering positions. Colonel Ballengee has received several awards and honors, which include the Meritorious Service Medal with four oak leaf clusters, and was honored as the 1996 Field Grade Officer of the Year, Air Force Inspection Agency Medical Directorate. On 30 September 2002, she was officially promoted to the rank of Colonel.

Congratulations and welcome Colonel Ballengee!

# **Congratulations Brooks AFB!**

On 22 July 2002, Brooks Air Force Base (AFB) became a "city base" and is now named Brooks City Base, a technology business center. PROACT congratulates Brooks on their achievement in successfully transferring the base to the Brooks Development Authority.

Brooks was also selected as a recipient of the "2002 Commander-in-Chief's Installation Excellence Special Recognition Awards." These awards recognize outstanding efforts made by those who operate and maintain Air Force installations. The nomination package specifically cited Brooks AFB's innovative approach to streamline the environmental process for transferring federal property. Base officials were also commended for collaborative efforts in working with the local community to implement Brooks City Base.

# In Our Customer's Own Words...

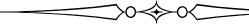
I don't think I have ever had a service from anywhere quite as professional and efficient. The PROACT staff was friendly and went above and beyond!

Ms. Brenda Waite 436 ADOS/SGPB Dover AFB





## **New Tools and Guidance**



### AF Sustainable Facilities Guide

The Air Force Sustainable Facilities Guide has been updated and is now available on-line at <a href="http://www.hqafcee.brooks.af.mil">http://www.hqafcee.brooks.af.mil</a>. This tool was developed as a strategic resource for US Air Force project managers to support the development of next generation buildings and infrastructure that reduce life-cycle cost of Air Force facilities, reduce the environmental impact of these facilities and improve the rate and efficiency of complying with existing Executive Orders, policy acts, and laws that pertain to the environment.

This website uses the LEED<sup>TM</sup> Rating System as its organizing framework. It will allow you to quickly reference the LEED<sup>TM</sup> requirements, determine the applicability of the requirements to your Air Force project, and identify where documentation needs to occur. It is intended to act as a "roadmap" to guide you step by step, through the process of developing a sustainable facility from pre-design to occupancy of the building.

## **PROACT Mailing**

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Thanks for supporting us in our P2 initiative.

### CrossTalk

CrossTalk is published monthly by PROACT, a service of the Environmental Quality Directorate, Headquarters Air Force Center for Environmental Excellence (HQ AFCEE/EQ), Brooks Air Force Base, Texas.

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Readers may submit articles or photographs for publication. Material will be edited, however, to conform to PROACT and Air Force guidelines.

Correspondence should be addressed to PROACT's editorial office at 314 E. Commerce Street, Suite 200, San Antonio, TX 78205; DSN 240-4214, (800) 233-4356, or pro-act@brooks.af.mil.

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# **ECAMP BMP Update**

The Air Force Environmental Compliance Assessment and Management Program (ECAMP) is a tool designed to assist Air Force installations and organizations as they assess their compliance with various federal, state, local, and Air Force environmental requirements. Aside from noting potential program non-compliances, ECAMP reports also identify positive findings or Best Management Practices (BMPs) that demonstrate a standard of excellence or an achievement considered best-in-class. The ECAMP Final Report for Langley AFB contained several positive findings, or BMPs, one of which is highlighted here from the Wastewater Management Protocol.

# Wastewater Reduction Initiative Langley Air Force Base, Virginia

Langley AFB has implemented the use of two water evaporators to improve floor scrubbing operations in 12 hangars that service aircraft. The floor scrubber water contains contaminants that include petroleum products, corrosive soaps, metals, and sediments. Even though analytical results of the scrubber water indicated the waste stream was non-hazardous, it could not be discharged into the sanitary sewer because it did not meet the required effluent permit limits. In order to improve the time-consuming disposal method, which required a contractor to transport 55-gallon drums from the hangars to a 90-day hazardous waste storage facility, Langley AFB conducted a six-month evaluation of evaporator systems for the water-based waste.

In the evaporator system, liquid waste from the scrubber is pumped through an initial filtration device and then into a holding tank. From the holding tank, the liquid is processed through an evaporator unit that separates water from the waste and collects granular, oil, and other debris into a containment area. From the containment area, the waste is drummed and turned in for characterization. These environmentally friendly water evaporators are closed-loop systems that eliminate liability and 'notices of violation' by not properly handling the scrubber water. This system requires no oversight once the scrubber water has been transported to the evaporator, allowing personnel to return to their jobs. This significantly reduces base personnel time and funds to support floor-scrubbing operations.

Use of the evaporators has reduced the waste stream by 98% of its original volume. In addition, the number of drums handled was reduced from over 50 monthly to approximately 6 drums of sludge per year. This has resulted in a reduction of drum purchases of 50 to 1, with a cost savings of \$4,414.08. Other savings were realized in avoiding the disposal cost of 500-pound drums through Defense Reutilization and Marketing Office (DRMO) at a rate of \$0.12 per pound. This resulted in a savings of \$6,558.60 during the six-month trial period, which translates to a cost savings of approximately \$60,000 per year. With cost avoidance and manpower savings the \$43,000 spent for both units was recovered during the first year of operation.

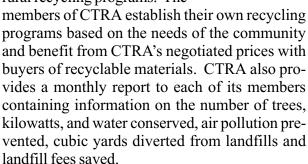
For additional information regarding the evaporator program at Langley AFB, please contact Mr. Matt Goss, 1 CES/CEVC, at DSN 574-1130 or via e-mail at matthew.goss@langley.af.mil.

# **P2** Initiatives → → ∞

## **AETC Recycling Initiative**

Three Air Education and Training Command (AETC) bases in Texas (Randolph AFB, Lackland AFB, and Laughlin AFB) joined the Central Texas Recycling Association (CTRA) in order to maximize recycling benefits and streamline annual recycling budgets. The CTRA is a 501(c)(3) nonprofit organization which was formed in November 1994 with a mission to assist organizations in cooperative marketing of recyclable commodities, promote development of

end-markets for recyclables in Texas, and to promote education about recycling. With a grant from the Texas Natural Resource Conservation Commission (TNRCC) – recently renamed the Texas Commission on Environmental Quality - the Lower Colorado River Authority (LCRA) was able to establish the CTRA. CTRA operates as a co-op of small rural recycling programs. The



AETC bases in Texas have benefited from partnering with CTRA with the relief of non-core manpower functions such as bill collection. AETC bases experienced a tripling of their revenue after joining CTRA. In return, AETC bases have revolutionized their recycling practices, which has led to two awards for the CTRA. Randolph AFB's recycling program includes a process of sorting paper into various quality groups. This

initiative assisted the CTRA in receiving the American Forest and Paper Association's 2002 Best Paper Recycling Award in the nonprofit category. The award recognizes the best recycling programs in America, and bases selection criteria in part on paper collection programs that emphasize improving recovered paper quality.

The AETC bases in Texas processed 40% of CTRA's recycling tonnage, which was significant in qualifying the association for the National Recycling Coalition's (NRC) Stewardship Award. AETC conserved 64,375 trees, 15,535 kilowatt hours of electricity, and 26,507,600 gallons of water. They prevented 227,208 pounds of air pollution, diverted 11,360 cubic yards of waste

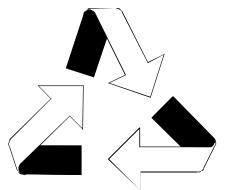
from landfills and saved \$378,713 in disposal costs. In addition, AETC earned \$163,376 in sales revenues. The Stewardship Award was presented to CTRA Chairman, Mr. Michael Redfern, HQ AETC/CEVQ and LCRA Board Chair, Ms. Gale Lincke by Federal Environmental Executive, Mr. John Howard at the 2002 NRC Annual Congress and Exposition, 9-10 September. The

Stewardship Award recognizes the leadership of organizations that demonstrate outstanding efforts to reduce waste and the use of natural resources.

If you would like your installation to participate in a similar program, contact Mr. Michael Redfern (HQ AETC/CEVQ) at DSN 487-3240 or via email at michael.redfern@randolph.af.mil.

Additional information is also available by visiting the following websites:

- Central Texas Recycling Association http://www.cash4trash.com
- National Recycling Coalition http://www.nrc-recycle.org



# **Conference Corner**



# **7<sup>th</sup> Annual P2-HWM Conference: An Outstanding Success**

Over 3400 participants attened the 7th Annual Joint Services Pollution Prevention and Hazardous Waste Management Conference held 19-22 August 2002. The 7th annual conference was co-located with the 2002 Geospatial Technologies Symposium and Exposition. Attendees could participate in technical sessions and visit with vendors who specialize in both areas. The attendance this year broke all records from previous years due to the combination of the two groups. The 350 available exhibit spaces were sold out to 295 exhibitors. Conference organizers received numerous positive comments from attendees regarding the convenience of having the two conferences colocated. The Geospatial Technologies Board of Directors voted during the conference to colocate their next symposium with the 9th Annual Pollution Prevention and Hazardous Waste Management Conference in 2004.

Technical session presentations and attendee roster are now available for download from the website (see address below).

Mark your calendars for next year's conference, to be held 11-14 August 2003 at the Henry B. Gonzales Convention Center in San Antonio. The Call for Abstracts will begin 15 December 2002 and may be submitted on-line at <a href="http://www.p2-hwmconference.com">http://www.p2-hwmconference.com</a>.

## **Air Quality Symposium**

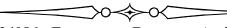
The Symposium on Air Quality Measurement Methods and Technology will be held 13-15 November 2002 at the Cathedral Hotel in San Francisco, California. This conference will focus on the agenda of the previous Symposium on Measurement of Toxic and Related Air Pollutants.

Attendees will be able to participate in an information exchange on current advances in air monitoring and measurement methods and technology. Topics to be covered include: chemical speciation data analysis, superfund air toxics monitoring, ambient monitoring and toxics measurements, and ozone studies. For more information regarding this conference, visit the Air and Management Waste Association website at <a href="http://www.awma.org/events">http://www.awma.org/events</a>.

### **ASIP Conference**

The Aircraft Structural Integrity Program (ASIP) Conference will take place in Savannah, Georgia 10-12 December 2002. The conference, sponsored by Air Force Research Laboratory (AFRL) and the Aeronautical Systems Center (ASC), brings together Government and Industry world leaders in aircraft structural integrity. The goal is to disseminate information on current technologies for the safe, reliable design and acquisition of new aircraft systems and for the maintenance of aging aircraft in both military and civilian fleets. It is an open conference with international attendance. For more information regarding this conference, visit the ASIP website at <a href="http://www.asipcon.com">http://www.asipcon.com</a>.

# **TI Roundup**



# **TI 24086 - Emergency Response Action Plan** *By Pam Jernigan*

A PROACT customer requested clarification concerning requirements of an Emergency Response Action Plan (ERAP). Specifically, the customer wanted to know if all electric pole oil-containing transformers need to be included in the ERAP, or if there is a threshold amount that triggers inclusion or special notation in the plan. There are no polychlorinated biphenyl-containing transformers at the customer's installation.

PROACT reviewed Title 40 Code of Federal Regulations 112.20(h)(1), "Emergency Response Action Plan" and Appendix F (1.K), which address requirements of an ERAP and the

inclusions for the facility-specific "Site Plan Diagram." Section (K) of appendix F states that the location of all oil-containing electrical equipment must be included in the Site Plan Diagram.

We contacted Mr. Robert Rosen, Emergency Response Branch, Region IV, Environmental Protection Agency (EPA), (404) 562-8761, who stated electrical equipment containing less than 55 gallons of oil does not need to be included in your Facility Response Plan (FRP) ERAP. Mr. Rosen referred us to an article on the EPA World Wide Web site at http://www.epa.gov/oilspill/ specrule.htm. This article discusses the highlights of the new Spill Prevention Control and Countermeasure (SPCC) rule, issued by the EPA on 17 July 2002, effective on 16 August 2002. The changes to the SPCC rule are intended to reduce the information collection burden on regulated entities by approximately 40 percent. One of the changes establishes a de minimis container size of 55 gallons, thereby exempting oil-containing electrical equipment with less than 55 gallons of oil from inclusion in the SPCC, FRP and ERAP.

### TI 24181 - Waste Storage Area Checklist

By Carl Lehman

A customer contacted PROACT for information concerning inspections of waste storage areas and accumulation points. The customer has the Environmental Compliance Assessment and Management Program (ECAMP) checklist, but would like examples of others to help in developing a thorough checklist.

PROACT searched our Technical Inquiry and Library databases, the Headquarters Air Force Center for Environmental Excellence (HQ AFCEE) World Wide Web (WWW) site, and the WWW using various popular search engines, and identified the following two checklists containing Code of Federal Regulations (CFR) references which were provided to our customer:

1. Environmental Protection Agency (EPA) "Resource Conservation and Recovery Act

- (RCRA) Storage Area Checklist." This checklist contains Satellite Accumulation Areas and 90-Day Storage Areas.
- 2. Oregon Department of Environmental Quality (DEQ) "Small Quantity Hazardous Waste Generator Checklist." In addition to a Hazardous Waste Management area, this checklist also contains Universal Hazardous Waste and Used Oil Management areas.

### TI 24192 - Road Deicers

By Pam Jernigan

A PROACT customer requested information regarding deicers for use on Air Force installation roads, parking lots, and walkways. The customer's installation is currently using two products, "FreezGard" and "Ice Slicer Super Blend" for this application and added that both of the products work well. However, the customer was interested in what other companies have to offer, specifically regarding sidewalk and parking lot deicers.

PROACT reviewed our Deicing/Anti-Icing Fact Sheet, July 2002 which states chloride salts may be used for deicing and anti-icing of base sidewalks, streets and parking lots. Please note: since chloride salts are corrosive, they should not be used within 300 feet of airfields.

We then searched the Thomas Register of American Manufacturers, and World Wide Web for deicers and located the following:

- 1. Standard Tar Products Company, Inc., Milwaukee, WI, (800) 825-7650, <a href="http://www.icemelters.com/index.htm">http://www.icemelters.com/index.htm</a>, advertises four chloride-based deicing products.
- 2. Ossian Inc., Davenport, IA, (800) 553-8011, <a href="http://www.ossian.com/">http://www.ossian.com/</a>, advertises eight chloride-based deicing agents.
- 3. Earth Friendly Chemicals, Inc., Virginia Beach, VA, (757) 226-2750, <a href="http://www.iceban.com/">http://www.iceban.com/</a> advertises three deicing products.

### TI 24113 - EBS Guidance

By Patrick O'Connor

A customer contacted PROACT for information concerning environmental baseline survey guidance found in Air Force Instruction (AFI) 32-7066, "Environmental Baseline Surveys in Real Estate Transactions." The customer specifically, had the following questions:

- 1. Does a Category 3 determination require sampling and analytical support to confirm "low" concentrations?
- 2. Is a Category 3 designation appropriate for roadways, parking lots, railways, utility easements, or any other area where any type of internal combustion engine has been used due to the relatively high likelihood that some unreported amount of petroleum product has spilled or leaked?
- 3. When does a Category 7 determination become an appropriate designation in areas where there are no records of environmental cleanups, petroleum storage, sampling, etc., but have facilities that were accessed by vehicles and equipment containing petroleum or other hazardous substances?

PROACT reviewed AFI 32-7066 and addressed each item:

#### ITEM 1:

According to Section 2.1.2.3, "for Air Force controlled property, base this conclusion [a Category 3, Contamination below levels that require any action, determination] on a characterization pursuant to the Installation Restoration Program (IRP)" and "for non-Air Force controlled property, base this conclusion on an equivalent level of evaluation that includes sampling and laboratory analysis." Therefore, any Category 3 designation requires analytical support to substantiate the assertion that contamination levels are in fact below levels that require action.

#### ITEM 2:

According to Section 2.1.2.3, a Category 3 determination is an appropriate designation for any "property where contamination is present but falls below established action levels." Consequently, parking lots, roadways, railways, and other similar areas can receive a Category 3 determination. However, as stated previously, this category designation must be determined in conjunction with analytical support.

### ITEM 3:

Regardless of how the suspected contamination originated, whether from an underground storage tank (UST) or from a vehicle spill, according to Section 2.1.2.7, "if the existence of contamination or potential for a release of hazardous substances into the environment or structures is indicated, but not well characterized then further evaluation is required." This section establishes two qualifiers for a Category 7 determination: 1), insufficient characterization; and 2), clear indications of contamination and/or potential release of hazardous substances. If the circumstance satisfies these qualifiers then it could receive a Category 7 determination.

Finally, we coordinated this response with Mr. Charles Brown, Environmental Analysis Division, Headquarters Air Force Center for Environmental Excellence (HQ AFCEE/ECA), DSN 240-4203, who concurred with our findings.

### **TI 24157 - New SPCC Requirements**

By Pam Jernigan

A PROACT customer requested information regarding the new Spill Prevention, Control, and Countermeasures (SPCC) Plan requirements found in Federal Register, Volume 67, Number 137, 17 July, 2002. Specifically, the customer wanted to know if all petroleum tanks above 55 gallons in capacity require secondary containment. The customer's installation is required to have a SPCC plan in accordance with the new SPCC rule.

PROACT reviewed Federal Register, Volume 67, Number 137, 17 July 2002, which states in part, "it is not necessary to apply SPCC or FRP (Facility Response Plan) rules requiring measures like secondary containment, inspections, or integrity testing, to containers smaller than 55 gallons storing oil because a discharge from these containers generally poses a smaller risk to the environment." Although inferred that containers 55 gallons or more require secondary containment, we found no specific language stating so.

We next contacted the SPCC Hotline, (800) 424-9346, whose representative stated secondary containment is required, under the new SPCC

rules, for all oil containers with a capacity of 55 gallons or more.

Further review of the new SPCC rules indicates that sorbent materials, drainage systems, and other equipment may serve as possible forms of secondary containment systems. Additionally, in many cases, secondary containment may not be practicable, however, you must provide a contingency plan following the provisions of Title 40 Code of Federal Regulations (CFR), Part 109, "Criteria for State, Local and Regional Oil Removal Contingency Plans" and otherwise comply with Title 40 CFR, Section 112.7(d), and document it in your SPCC Plan.

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